1: Bowen-Jones et al. K-5 (1955-1958) 1961
EZ6 Malta EZ6

Islands and could thus provide continuity in the interpretation of the records of the many field workers. 311* 114

The survey parties worked in the Islands during the months of March and April in each of the three years 1955, 1956, and 1957. In March-April and August-September 1958 the authors themselves carried out final checks. During the Spring periods, the use of fairly large teams of observers, between six and eight in number, enabled the work to be concentrated at a critical time when the widest range of crops and of activities are to be seen. Summer vegetables and cotton are the only major crops not then in the fields and this difficulty was overcome by the enlistment of the other Durham research workers permanently residing in the Islands and by a summer visit of one of the authors. Objection might be raised to the spreading of the survey work over more than one season. The difficulty of completing such work on such a scale during one short period of time is not a sufficient answer. The real answer is that the time spread did not matter. The miniscule field pattern and the further subdivision into separate plots, both amply illustrated in the examples shown here, mean that crop changes from year to year merely result in the re-shuffling of tiny pieces of an intricate mosaic. The variety of crops grown and identified (see below), the relative uniformity of crop sequences and the individuality possessed by the various regions, further remove any deficiencies apparently implied by this particular method. The spreading of the fieldwork over a number of years did in fact allow both the checking of methodological validity and the carrying out of subsidiary pieces of work. For example, sample areas were surveyed during each of the four years, thus giving an accurate picture of crop sequence and rotations, as well as a check on short term change.

The following crops were individually identified in the field: sulla, wheat, barley, vines, fruit, olives, potatoes, onions, tomatoes, marrows, other vegetables, broad beans, peas and vetches. In addition, uncropped land was recorded as waste, fallow, rough grazing or tilled. In several cases, e.g. vegetables, fruit and vetches, a note was made of the actual variety of plant being grown, e.g. cauliflowers, artichokes, apples, peaches, lemons, *gilbiena*, *zozfa*, *widna*, etc. Coloured maps on a 6-inch scale, showing the 18 different crops and uses of land have been prepared. Cost of publication prevents their reproduction here, but they have been used in the preparation of this volume, particularly in Chapters VII B and VIII. The Land Use Maps (Figs. 69 to 98) show the distribution of individual crops, though the range distinguished has been somewhat curtailed. Wheat and barley, tomatoes and marrows, the various vegetables, broad beans and peas, and vetches and minor fodders have respectively been combined into single maps although the accompanying text notes regional variations. These 14 distribution maps in black and white have been prepared by reduction from the coloured 6-inch series. They were originally prepared on a 2-inch scale, and were thus directly comparable with the standard 2-inch topographical sheets and with the 2-inch geology and soil maps. The distribution maps, together with the coloured 6-inch are at present stored in the Durham Geography Department and it is hoped that the former at least will eventually be published on a 2-inch scale. The amount of cartographic work involved has been at least as great as that done in the field, and, since it was carried out by the authors alone it has consumed a considerable amount of time. However, it is felt that the labour has been justified in that only by accurate cartographic representation and by deduction from the maps can easy generalities be avoided. The long term character of the project also made easier the establishment of friendly contacts with local individuals, both official and private, whose help is sincerely acknowledged, and at the same time allowed the authors to amass a background knowledge of the Maltese Islands which has been invaluable in their interpretation of the agricultural landscape. [241] 102 311* 126

Note. A preliminary report - 'Agriculture in Malta, a survey of land use', was produced by H. Bowen-Jones and J. C. Dewdney, at Durham, in 1955. 113

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

population as 20,000 in 1582. In 1632, 50,113 is given, and in 1667, 53,000. In 1741, 110,000 is the population, which is said to have increased to 114,000 in 1798. The figures for Malta and Gozo in 1826 are stated to be 119,736. But the first reliable figure is 115,945 in 1828. In 1881 the population was 132,129 in Malta and 17,653 in Gozo; in 1901, 184,742, and 1911, 211,564.

In regard to the proportion of the sexes there were in 1911 110 bachelors to 100 spinsters, 98 husbands to 100 wives, and 44 widowers to 100 widows. In round thousands, the males over 5 years of age were engaged in the following occupations: 7 in professional, 2 domestic, 19 commercial, 12 agricultural, 21 industrial, and 31 were unproductive and unoccupied; the last figure is rather misleading as it includes at least four separate classes—children, aged, people of independent income, and incapables of all classes. The data in regard to foreigners is the most interesting for our purpose, as it gives an insight into the amount of mixture that is taking place. There were at the last census (1911) (31) 854 ♂ and 1,003 ♀ foreigners in the island. Of these 3 ♀ were English, the remainder were made up as follows: 77 ♂ and 45 ♀ from Africa (apart from 1 ♂ and 2 ♀, all these came from Egypt, Tripoli, Tunis and Algeria); 479 ♂ and 499 ♀ from Sicily; 156 ♂ and 253 ♀ from other parts of Italy; 36 ♂ and 39 ♀ came from Greece, and 11 ♂ were classified as Asiatics. This does not, of course, include the garrison, a large floating population of which the figures are uncertain, as they depend so much on the ships which happen to be in harbour at the time when the census is taken. The increase of population between 1828 and 1911 is of interest. That of Malta increased by 88·25 per cent. of the total, and that of Gozo by 45·31 per cent. The increase in Malta was nearly five times as great in the suburban area as in the other areas combined.[1]

The density per square mile in 1911 was 1884 (Malta 2167, and Gozo 879). The density in the south-east corner of Malta is, however, greater than would appear from these figures. If the island be divided along a line west of Gargur, Naxaro, Musta, Notabile, Rabato, Crendi, the areas east and west of such a line would be almost equal in size. The eastern area, however, contained in 1911 183,132 inhabitants, and the western 5737. Practically all the Neolithic remains occur in the eastern area, suggesting that the centres of population have not changed appreciably since Neolithic times.

V.—Material and Methods.

The skeletal material examined is conveniently grouped in four series: (i) Bones from the Hypogæum at Hal Saflieni (Malta Local Neolithic); (ii) Miscellaneous ancient skeletons, chiefly Romano-Maltese; (iii) Specimens from the Chapel of Bones (Late Mediæval); (iv) Modern bones. Only in case (ii) were any complete skeletons available.

[1] Since this article was written the results of the Census of 1921 have become available. They are as follows:—Malta, 189,697 (92,127 ♂, 97,570 ♀); Gozo, 22,561 (10,618 ♂, 11,943 ♀). Total for the two islands, 212,258, an increase of only 694 since 1911, as against 26,822 in the previous decade.

3: Buxton D-5 (1920-1921) 1922 EZ6 Malta EZ6

126 141 172 (i) The Hal Saflieni bones (whose antiquity we have already discussed) are in a very bad condition; few long bones are complete. After sorting through several tons of fragments, measurements were taken on such bones as were sufficiently well preserved. A number of astragali were brought to England for more detailed examination later. The Hal Saflieni crania, which had previously been examined by Bradley, were re-measured.

(ii) There are in the Museum of Valletta and in the Roman villa at Notabile a small series of ancient skulls and some complete skeletons, most of which were excavated by Dr. Zammit. These can be exactly dated by archæological evidence, but are unfortunately too few to warrant the drawing of any definite conclusions.

126 141 (iii) The Chapel of Bones is a large, fantastically arranged ossuary. It is alleged to contain the bones of patients dying in the hospital of the Knights of St. John, and probably dates from the seventeenth and eighteenth centuries. There are several remarkable features about these bones, first the number of aged persons represented, suggesting generally the type of population which finds its way into the casual ward of a modern institution, secondly the almost entire absence of the female sex; among 500 skulls selected at random, about 8 per cent. only were sexed as ♂?, ♀?, or ♀; these have not been included in the final count. It is, of course, quite possible that the number of female skulls is even less, but there was an orphanage attached to the hospital, and some children's bones were found in the ossuary, which may contain a few bones of nuns. The method of selection—for the number of bones is very great—was as follows: The skulls are arranged on shelves, and any skull without a basion was rejected, otherwise no selection was made; long bones were picked out where the epiphyses were sufficiently well preserved for measurement. Unfortunately the person who arranged the ossuary mixed up all the bones, and wired the wrong mandibles on to the crania. Although, therefore, as a whole, the bones belong to the same series of persons, the association of particular long bones with each other, or of particular mandibles with skulls is impossible. The sexing was of the type that Professor Pearson terms "anatomical sexing." All the bones were removed to the Anatomical Department at Valletta, and measured there.

(iv) The modern bones are from an ossuary, and were set at my disposal by Dr. Busittel, who was kind enough to allow us to use a room in the Anatomy School at Valletta. As some of the bones were used for teaching purposes, it is possible that a slight selection has been made; but enquiry into the method of obtaining the material inclines one to the belief that on the whole they are chance specimens, and a number of skulls were actually examined *in situ*. Sexing presented again considerable difficulty; fortunately, however, in a number of cases they had not been properly macerated.

141 125 In measuring the living it was necessary to find such as would submit themselves to examination; as far as possible, however, typical Maltese were taken. The

4: Cassar P-4, 5 (no date) 1964 EZ6 Malta EZ6

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CAPTIONS TO PLATES

PLATE I

Fig. 1. Silver votive offerings representing various parts of the body. The model between the trunk and the ear is a stylized form of the female breasts. (By courtesy of the Director of the National Museum, Valletta. Photograph by Jos. Spiteri.)

Fig. 2. This leg of baked clay is from the Roman ruins at Ras-ir-Raheb to the north west of Bahria, Malta. (By courtesy of the Director of the National Museum, Valletta. Photograph by Jos. Spiteri.)

Fig. 3. Bronze dies of liver and lower limb used by Maltese silver smiths for the manufacture of the silver 'ex-votos'. Scale in centimetres and inches. (By courtesy of the Director of the National Museum, Valletta. Photograph by Jos. Spiteri.)

PLATE II

Fig. 1. The picture tells the story so clearly that no inscription is attached to it. Note the Maltese type of windmill and the costumes of the peasants still in use during the last century. Tal Hlas Church, Qormi. (Photograph by Jos. Spiteri.)

Fig. 2. The landscape is not Maltese. Presumably this 'ex-voto' was offered by a foreigner or else the donor was a Maltese who met with a riding accident abroad. The letters V.F.G.A. stand for 'Votum Fecit Gratiam Accepit' (A vow was made and a favour received). Tal Mirakli Church, Lija, Malta. (Photograph by Captain C. Zammit, F.S.A.)

[plate I will be found facing p. 24; plate II faces p. 25. – Ed.]